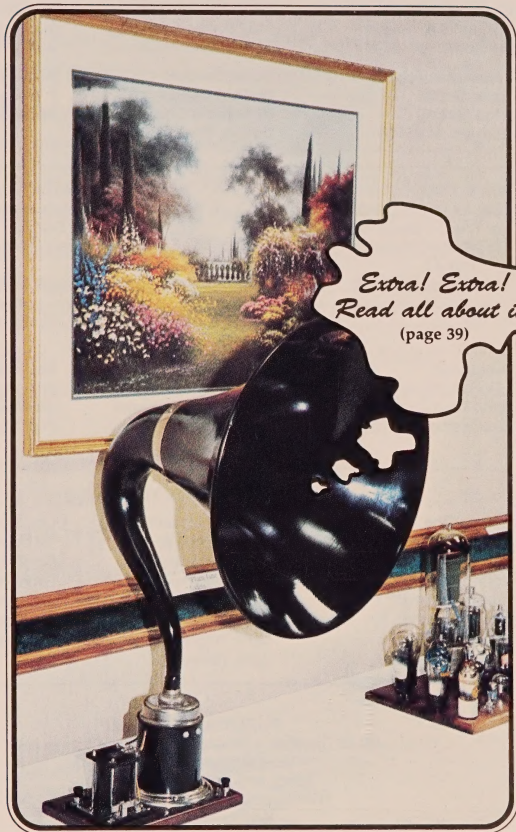




Old Equipment Contest CLASS VI SPEAKERS
First Place Winner - Magnavox R2 - Robert Nelson (see pages 23-30)

The Antique Radio Gazette is the official publication of The Antique Radio Club of America, Inc.

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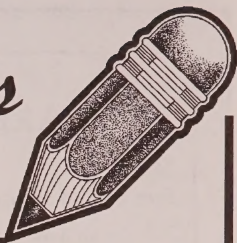
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President's Letter



Over the past few months I have given a great deal of thought as to what I should pen as my final remarks in the GAZETTE. There would be little need to recap the history of ARCA because you can do that better by reviewing past issues of the GAZETTE.

I think the most important thing to remember will be all of the great friends Patsy and I have made in the 20 years we have been involved with ARCA. There are many of you who I hold as friends, and when you try to single out a few, invariably someone will be left out. However, there are some who I think must be mentioned.

Gordon G. Eklund, now deceased, extended the first hand of friendship 20 years ago. I owe Gordon for bringing me into this association. Morgan McMahon, whose two great books, "A Flick of the Switch" and "Vintage Radio", started many of us into our "radio dream land". Jim Troe, Bill & Jane Denk, Ruth Drake and Mel Comer gave me the courage to continue. To the list I will add our entire Board of Directors, which includes former presidents and writers; and John Drake, who for 17 years published our GAZETTE, which was the cement that held our club together. The most recent support has come from Jim & Barbara Rankin, Bill Dawson, and Ron & Jan Frisbie. An impressive list anyway you look at it!

It has been a privilege to have served you for the past 10 years as an officer of this organization. This fraternity stands

out from many collector societies, probably because of its infancy, as related to other collector groups. There is, however, an increasing underlying trend of self-serving interests that will take away a lot of innocence that many of us have enjoyed. That is sad, but represents the trend of any collectable that becomes dollar oriented.

We have to remain focused and look forward to the rewards of the nation's two clubs joining together for one great cause. Many of you already belong to AWA and the rest of our members will soon enjoy the association with this organization. You have read the details of the reasons and the merger proposals elsewhere in this magazine, but I cannot overemphasize the importance of your voting in favor of this proposal. We must maintain at least one strong national organization to represent the cause that we have given so much for.

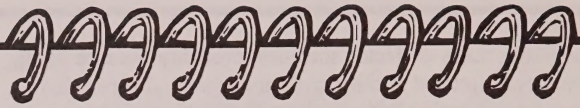
The two great radio manufacturers of all times, RCA and GE, came back to each other to form one big manufacturer. There is no reason for our club not to enjoy what has become a sign of the times, a new beginning, an opportunity not to be missed.

Thank all of you for your support, and thank you, Patsy, my wife, for the long and countless hours you have given so that I might enjoy a great hobby and contribute something to the preservation of radio history.

So long until tomorrow, and God's care and speed to all of you.

Lloyd E. McIntyre II
President

Patsy S. McIntyre
First Lady of ARCA



Dear Sir,

Would you please send informations on the 2nd Annual RX for Spring Fever swap meet. I attended last year and feel it's worth doing it again. You can take that as a compliment, considering it's a 6 1/2 hour drive! Thanks.

**Spencer Doggett
61333 North Ridge Trail
Washington, MI 48094
(810) 651-3811**

Mr Dawson,

Please renew my membership in ARCA for five years. I am enclosing a check in the amount of \$ 55.00. Keep up the good work!

Sincerely,

**Holt F. Davis
2213 Russell McPherson Road.
Burlington, NC 27215**

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Ethophone Grand

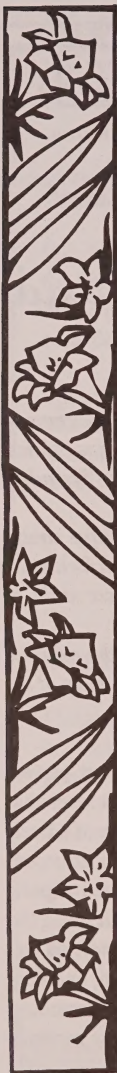
by Dr. Ralph Muchow
Elgin, Illinois

Some fifteen years ago, I had the good fortune to obtain what in 1925 was considered England's finest example of the radio, "wireless" art: the "Burndept ETHOPHONE GRAND".

To acquire such a deluxe piece of antique equipment in absolute mint condition was indeed fortunate. This set was owned by The Viscount of Scarsdale, in England.

I was indeed fortunate to also have the original manual available with the set from which most of the following text was derived.

The ETHOPHONE GRAND is the most perfect and most powerful all-wave broadcast receiver that has ever been produced and is the outcome of a decision, made many months ago, to design an instrument of unsurpassed efficiency. After prolonged experiment *the ideal has been achieved*, the result being the ETHOPHONE GRAND. No consideration of expense has been allowed to influence design, and thus we have been able to produce an instrument standing in a class by itself, and probably the finest receiver ever made.



The ETHOPHONE GRAND is exceptional in many ways; the circuits used embody new principles, invented and perfected by the *Burndept* Research Department. The magnificent cabinet has been designed in co-operation with Messrs. Broadwood.

The purchaser of an ETHOPHONE GRAND will have the satisfaction of possessing a wonderful instrument, which will give endless pleasure to those about him, and further, he will know that he has got the very best. The ETHOPHONE GRAND is capable of receiving "Broadcast from anywhere - on any wave," and, under reasonable conditions, *always on the loudspeaker*. "All stations" means not only all British broadcast stations but all continental stations of normal power, and further, during the winter months, a number of American broadcast stations. Within 10 or 12 miles of a normal power station excellent loud speaker reception is obtained without *any aerial or earth*, similar results being given on a Frame Aerial up to about 50 miles.

The wave-length range of the ETHOPHONE GRAND is unlimited: when the two radio-frequency valves are switched on full amplification is obtainable from 80 to 5000 metres. No other broadcast receiver now available will amplify at radio-frequency short waves of the order of 100 metres, and although at the present state of the art short wave broadcast is in its infancy, this system is bound to come into use at no very distant date: congestion of medium wave-lengths is great, and the situation can be relieved only by going to short waves. These considerations have led us to provide in advance for short wave reception, so that, unlike all other broadcast receivers, the ETHOPHONE GRAND will not become obsolete when these developments take place. It should be noted that when the radio-frequency valves are

switched off the wave-length range of the instrument extends to 25,000 metres.

The ETHOPHONE GRAND is a five-valve receiver. As explained above, the first two valves are radio-frequency amplifiers and can be switched on or off at will; the third valve is a Detector-Amplifier, and the last two stages are Audio-Frequency Power Amplifiers, which can be used singly or together as occasion arises. The tuning arrangements are both simple and effective in that one method provides for those who desire easy control free from all complications, removable coils, etc., and an alternative method offers every possible control and adjustment required by the skilled experimenter. To enter into greater detail, the first class of user is catered for in that the ETHOPHONE GRAND is supplied complete with two "wave blocks" (300-500 and 1200-2000 metres respectively) thus including practically all the usual broadcast wave-lengths. To tune in a station a wave block is inserted in the special spring housing on the left-hand side of the cabinet, and then one dial is revolved, that is all! If there is any interference, a switch instantly brings into operation a more selective "loose-coupled" tuning circuit. With the wave blocks in use, the instrument *cannot oscillate*; thus the absolute stranger to wireless apparatus can learn to use the ETHOPHONE GRAND without annoying other listeners.

The more advanced user will not desire to use wave blocks, and for him a special three-coil holder comes with each instrument housed in a compartment under the lid. The coil holder fits the same spring housing as the wave blocks, and of course allows the operator to change coils, vary the coupling between the aerial and secondary circuits, and to control a reaction coil so as to secure the high amplification nec-





essary for long distance reception. Thus in the ETHOPHONE GRAND we have an instrument eminently suited to two entirely different conditions; firstly, it provides a receiver of great simplicity for those who are novices in the art of radio, and secondly, an instrument fitted with every possible control, and therefore suitable in every way for the expert user. Do not forget that you will not *always* require simplicity-- "the novice of to-day is the expert of to-morrow."

The two radio-frequency valves are tuned together by revolving a dial in the centre of the instrument. A patented form of wave indicating control gives nine wave-length ranges, going step by step from 80 to 5000 metres. Over the *whole* of this range there is not the slightest tendency for the radio-frequency valves to oscillate, and amplification is strong and steady even when the reaction coil coupling is adjusted.

In designing the circuits for high power loud speaker reception, a great deal of care has been taken to ensure *absolutely distortionless* operation. Every note of music and every spoken word is rendered with a purity and clarity hitherto unattained. A special control enables the volume of sound to be adjusted to a nicety, according to conditions. In a room the loud-speaker will not "bawl" at the listeners, yet a great volume of sound, sufficient to provide music for a dance in a large hall, can be obtained when required. The quality of the tone is also under control. A sharp, clear-cut tone or either of two degrees of round, full tone may be chosen according to the taste of the user.

No wireless receiver has ever before been built in such a beautiful cabinet as that which contains the ETHOPHONE GRAND. As it is by BROADWOOD, it is beyond criticism. The cabinet has the appear-

ance of a casket, and is 35 inches long, 16 inches high, and 15 inches deep. It is made of solid mahogany, thoroughly seasoned and matured, and is French polished to an egg-shell matt finish: the side pilasters are inlaid with rosewood. The domed top of the cabinet is hinged to give access to the valves, and hinged to the inside of the domed top is a mahogany fall front which serves to enclose the instrument panels completely when the receiver is not in use: a lock concealed in the plinth prevents access of *unauthorized* persons to the instrument. As is usual in all BURNDIPT instruments, all terminals are placed on the back of the cabinet out of sight, but sockets are provided on the instrument panels so that telephones can be plugged in when required.

We have arrived at a point where we have to consider the actual operation of the instrument. Upon examining the front of the instrument it will be seen that there are three distinct sections: the left hand panel is the *tuner*, the centre panel is the *radio frequency amplifier and detector*, and the right hand panel is the *power amplifier*. In order to simplify these instructions, we will deal first with the centre and right hand panels, and will return to the *tuner* later. Presuming that valves have been inserted, batteries connected up, and rheostats placed at their "centre" position, we will explain the various controls. Dealing first with the centre panel the left hand key switch brings the two radio frequency valves into operation when they are required; when in the "off" position those two valves are out, the *h.f. tuning* and *h.f. control* dials are out of circuit, and the third valve then functions as a normal detector valve with reaction on to the secondary coil of the tuner. The right hand "master switch", when set to the "off" position, switches all valves off, including those of the power amplifier, and disconnects



all batteries. The dial marked in wave lengths can be rotated and set in nine different positions according to the station it is desired to receive. One range for instance is marked 300 to 450 metres, the large dial immediately below then tuning to something less than 300 metres when it is set to 0 degrees or something more than 450 metres when set to 180 degrees; therefore by revolving this dial all waves indicated on any range of the upper dial can be tuned; it should be noted that these two controls do not operate at all unless the radio frequency valves have been switched on.

Turning now to the right hand panel, the left hand key switch marked *power* cuts the power valves off when left in the central position, and this should be done only when quiet reception is desired on head telephones: normally this switch should be left either on *low* or *high* power according to the volume of sound desired on the Loud Speaker; in passing it may be stated that Low and High power means that either one or both Power Valves are lighted. The *volume* of sound may be further adjusted to four different degrees by moving the *volume switch*, and lastly the quality of tone may be varied to suit individual taste by placing the right hand key switch either centrally, up, or down; as a rule, for *speech* set this switch to the centre, and for *music* either up or down according to the “roundness” of tone desired.

The ETHOPHONE GRAND is to the ordinary run of Broadcast Receivers what the Grand Piano is to the Upright, so far superior in both performance and appearance that there can be no hesitation as to which is the more desirable acquisition.

It was a pleasure to exhibit the radio at the ARCA National Conference at West Virginia in 1993 and it is now on exhibit in my Historical Radio Museum in Elgin, Illinois.



News from West Virginia

It is difficult to believe that 1994 is half over. Activity has been rather brisk so far. First, there was the Spring Fever Rx in which the Museum of Radio and Technology participated as cosponsors with the Pittsburgh Antique Radio Society (PARS), and the Mid-Atlantic Antique Radio Club (MAARC). This event was held at the Washington County, Pennsylvania fairgrounds.

The Museum of Radio & Technology conducted its first mini-meet of the year on April, 23rd. In addition to the usual flea market and afternoon auction, there was a morning auction of computers, dumbterminals and lots of other non-radio electronic gear.

The Museum presented its first annual historical hobby fair on April 30th and May 1st. The public was treated to a nice variety of hobbies here at our location. Several operating antique toy steam engines and a restored 1949 Cushman Scooter were part of the exhibition. Something else for the older "kids" was an A.C. Gilbert Hall of Science display. This included erector sets of various sizes, one of which was assembled as a large operating ferris wheel. Other Gilbert items were: chemistry sets, puzzles, carpenter's tools, an atomic energy set, a soft metal casting set, American Flyer trains and more. A very nice, very old, strictly mechanical pin ball machine with broadcast theme logo was a nice addition.

There were a number of old stamped steel toys in very good condition to be seen. Old pedal cars were joined by wagons, firetrucks and smaller toys. Edison cylinder talking machines took their places along with disk type spring wound equipment of yesteryear. A 1947 Seeburg Jukebox stood stately among the other recorded music reproducers.

Two separate Coca-Cola collections were there for viewer appreciation. One was complete Coca-Cola village, the other was made up of an original "cooler" radio, Coke table tennis game and more.

We had a good selection of irons consisting of sad irons, charcoal, kerosene, gasoline and electric types. There were some pictorial displays of local history, a genealogy booth and a Hallmark collectors club.

One exhibitor displayed a portion of his tremendous Griswold ironware collection by bringing in approximately 75 fine pieces. He brought a selection of railroad locks and keys, military buttons and medals. There was also a collection of miners' scrip. Lots of coffee mills of different sizes and styles attracted a good bit of attention. We were treated by the appearance of a Nipper collection and large and small slide rules.

Old stoneware was another item of this event. Most of these collections consisted of pieces bearing individual merchant's name and/or town applied by the manufactures. A shadow box display featured miniature coaches and carriages, along with a handcrafted fire-truck of the 30's complete with operating siren and flashing red lights. A nice display of both old and new quilts adorned one wall of the auditorium. Several rare old wooden seed catalogs were also shown. We also got to see a marionette stage and several pieces of stock.

Beginning at 1:00pm Saturday, James E. Casto, associate editor of the Huntington Herald Dispatch, captured the attention of the audience for approximately an hour. His Chataugua style, three part presentation was based on the life and times of Collis P. Huntington, rail tycoon and founder of Huntington, West Virginia.

Part one portrayed Mr. Huntington in an informative monologue, complete with mannerisms and period clothing. A question and answer session made up part two, and in the last part, Mr. Casto leaves the Huntington character, takes further questions and makes his final program remarks. The Collis P. Huntington Railway Historical Society also displayed at this event.

Now, to the outside activities. The Society for creative Anachronism set up a pavilion and performed magic tricks, drumming, dancing, etc. Next year thy plan to exhibit medieval

sword fighting. A 32 volt Delco Power Plant chugged away providing juice to run a 32 volt radio, fan and water pump. A model A Ford and two Chandler automobiles were also on view. One Chandler was a 1928, Model 65 four door Phaeton. Another outside attraction was a collection of corn shellers.

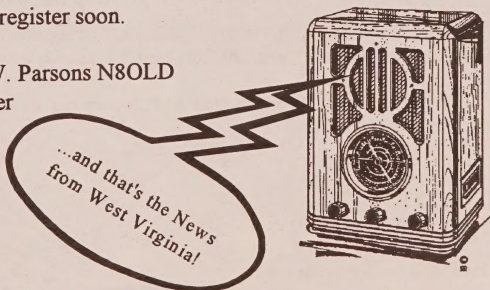
Needless to say, we were pleased with this first fair. A great bunch of exhibitors and their collections were of great quality. The public came, saw and enjoyed the collections as well as the good hot dogs. We plan an even larger one next year.

This spring, a group of local ham radio operators formed an amateur television club. They organized under the name of Ohio Valley Wireless Image Association. The TV repeater is up and running on the 440 MHz Band. The new club has members in Kentucky, Ohio and West Virginia. This ATV venture previewed last year with balloon launches bearing onboard amateur television transmitters. The repeater is located in Huntington.

The Tri-State Amateur Radio Association will sponsor the Huntington 1994 Ham Fest and computer show scheduled for Saturday, August 13th at the Huntington Civic Center. If you are in this area and wish to stop by, the talk-in frequency is 146.76MHz with a minus split. The civic Center is located on 3rd Avenue at 7th Street, East. Plenty of parking is available nearby.

That is all for now, hope to find your name on the Museum register soon.

Zane W. Parsons N8OLD
Reporter



...and that's the News
from West Virginia!

Report On the 2nd Annual Radio Rx For Spring Fever '94

Three words for Spring Fever '94 - SUCCESS, SUCCESS, SUCCESS! With the dedicated effort of a few radio buffs, we have pulled off another great meet. Plans for '95 are in the works, and with the addition of the new 15,000 sq. ft. building, a pre-Spring Fever '95 registration and promotional brochure, we feel Spring Fever will become the premier radio event in the mid-Eastern U.S.

The sole basis for Spring Fever is to keep it simple and earn some much needed money for our club treasuries, and let others know something about our clubs.

There were 185 people in attendance, along with 33 vendors. There were several wives and young supporters, and a few others who may have slipped by that were not counted. This would push the estimated attendance over 200. Some people came early and stayed late, while others came early and left early or came late and stayed late; thus giving us a lot of traffic all day.

The auction saw 168 lots offered, taking 4 hours to auction. The "staff" will change auction entries next year to exclude all non-radio related items. We had one Western Electric ATPT that sold for \$1,600.00 - what a radio! - Congratulations to the successful bidder. RCA Radiola 25 w/loop \$150.00: Jewett Radio Receiver with box, new, \$275.00: these were some of the highlights.

Spring Fever '95 will be March 25. There will be improvements and changes for '95, resulting from experiences and comments you have made.

Thanks to all who have supported the following clubs and organizations in this effort:

Museum of Radio & Technology, Inc.
ARCA West Virginia Chapter
Pittsburgh Antique Radio Society
The Mid-Atlantic Antique Radio club
Buckeye Antique Radio & Phonograph club
Niagara Frontier Wireless Association

Lloyd McIntyre - President



**A view of the vast area that we have to grow in.
A thousand Vendors? No problem!**



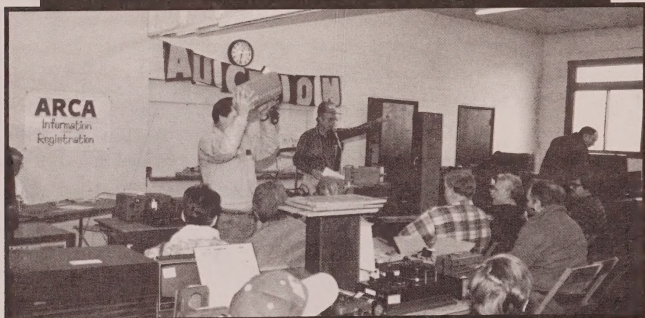
The Main Display & Center of Activity Building.



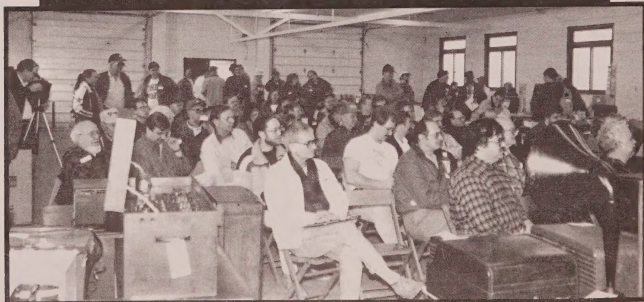
Some of the 168 Lots of Auction Equipment.



Vendors set up under shelters, low barns & horse arenas - A great time for all.



Lloyd McIntyre, Auctioneer, take another bid as the gang joins in the excitement.



The crowd gathers for the auction



**"Behind the Front Panel -
The design & development
of 1920's Radios"**

by David Rutland

Copyright 1994

Wren Publishers, 186 Jones,

51/4 by 8 1/2 \$18.95 plus

\$2.00 S&H.

*Order from
Museum of Radio & Technology*

What technology made the first radios possible in 1920? Who were the early pioneers and engineers? As the publisher asserts, these questions and more are answered by David Rutland in this new book. A book, this reviewer adds, which might well be in the library of every dedicated collector of early broadcast receivers who wishes better to understand and restore what he has in his collection. Although a paperback, this book radiates quality from front to back. The photographs (there are 24) are of good quality, and the schematics and drawings (there are 53) are clearly and beautifully drawn.

The book's coverage is revealed by its chapter titles: Radio Beginnings; Detectors I - From Sparks to Crystals; Detectors II - From Crystals To Tubes; RF Amplifiers - The Neutrodynes; The TRF's - Multi-Stage Rf Amplifiers; The Lossers; The Mechanics of One-Knob control; The electronics of One-Knob Control; Special TRF's; Shielded TRF's; Audio Frequency Amplifiers; reflex Circuits; Vacuum Tubes From Triodes To Screen Grids; The Superheterodyne; AC Replaces Batteries; and A Glimpse Of The Future.

Continue on page 18

For someone like this reviewer who has degrees in Electrical Engineering, who grew up with radio in the '20's, and who spent 37 years in radio manufacturing, this book afforded a pleasant opportunity to relive the growth of broadcast radio. And it reminded him of some facts long forgotten. Such as Tuska's "Superdyne" with its oscillation-prone tuned-grid, tuned-plate RF amplifier. Tuska's remedy was to use what looked like Armstrong's regenerative circuit with tickler control, but Tuska fed the energy back in reverse direction so as to provide negative feedback. He thus enabled the user to nullify the positive feedback resulting from the amplifier's grid-to-plate interelectrode capacitance.

Rutland's section on Reflex Circuits leads off with the simple Crosley Trirdyn, illustrated with an easy-to-follow schematic. He uses diagrams to explain Latour's Reflex Circuit, and David Grimes' improved Inverse Duplex.

The neutralized Bremer-Tully counterphase circuit is described not in the chapter on Neutrodynes, but in the chapter on Special TRF's. The section on the superheterodyne begin with a brief history of how it came to be developed in wartime France. Included are streamlined schematics of Armstrong's 1918 circuit, the Armstrong-Houck autodyne circuit, and RCA's AR812 Superheterodyne.

This book will be especially useful to the many collectors who may not have formal training in the electronic arts, but who seek a better appreciation of the old radios in their collections.

Bill Denk
W3IGU

To Whom it May Concern:

During the past year and a half (on the behalf of the Mid-Atlantic Antique Radio Club), I have been receiving your newsletter as part of our exchange program. I have been impressed with the quality that each publication has brought. Although some organizations are larger than others and therefore can present a more polished product, every newsletter has its individual merit. I have enjoyed the technical articles and the "newsy" minutes from the various meetings. These publications have been shared with our membership via a "news stand" that we set up at our meetings that allows members to view your club's articles.

I will be moving to Albuquerque soon and am transferring my responsibility to Joe Koester.

I will miss this camaraderie that the hobby allows us and request that you stay in touch with me lest I lose all contact with the world outside of New Mexico.

My new address will be:

**Geoff Shearer
14101 Mesita Cliff Rd.
Albuquerque, NM 87112**

Thanks for allowing me to share with you.

A Collector's Dream

by
Dale Davenport

The comment was typical. I was checking into the ARCA Convention contest with my entry, my pride and joy, and bumped into a fellow entrant and club member. My friend looked at my offering and said, "I didn't know there was a category for tool boxes." The jest rather aptly described my association with the Ace 3B portable. No one thought it was a real radio; it looks like a machinist's tool box. Even my ownership of the set was sort of by misunderstanding.

One evening a year or so ago, a collector friend called and asked if I would be interested in a home built battery set. I said maybe. He reeled me in by telling me it was chock full of Crosley parts but to him it looked like a homebuilt or modified set. It seems that the young woman who owned the set had contacted our club secretary about selling this old radio. The secretary thought it might be a "parts set" so she took the young lady to see my collector friend at his office. He admitted he was in sort of a hurry and didn't look the set over very well but thought maybe his friend (me) might be interested and agreed to call me and see what I thought of the set. I promised to go see the young woman at first opportunity, said good evening, hung up and promptly forgot about the call and the set.

Several days later I noticed my directions on the phone pad and made a mental note to go see the set. Again I forgot about it. More than a week passed before I thought of the "homebuilt" again and finally acted on my promise. The directions took me to a "questionable" section of town and a run down house, last painted when radios still all had tubes. The young woman answered my knock and invited me in to see the object of my visit.

In a small cramped kitchen lit with one sixty watt bulb hanging by its cord from the ceiling's center, I met the Ace 3B. The set's owner said the radio belonged to some departed member of her family and because she needed the money to feed her children she wished to sell the set. She dragged the thing out of a kitchen cupboard with apologies for its condition and with the offered explanation that she wasn't sure, but thought it was some sort of test equipment. I looked. I saw a cabinet with a Crosley sticker and an Ace 3B chassis. I was disappointed. I told the young lady I was sure that the set had been mounted in the cabinet by someone a long time ago and at best it should offer a chassis I could use but the cabinet obviously wasn't original. I made an embarrassingly low offer for the set and the young woman jumped at it. When the transaction was finished, the young woman delved again into the same kitchen cabinet and threw a pile of wire on top of the set, asking if I could use it and if so to take it along with me. I said my thanks, got out of there with the parts set, the wire, and went home to examine my "find".

At home I looked again in better light. The "free wire" cheered me up. The free wire turned out to be seventeen new, unused, old stock headphone cords. Ahhh, my invest-

ment was secure; I had not made a large mistake. The set though still looked to me to be something someone had made by putting a couple of sets together.

I thought about it for a few weeks. I called a nationally known collector of Crosley sets and described my find. He explained that Crosley had built a few Model VI and VIII sets into Oak portable cabinets but agreed that the Ace 3B chassis must have been grafted into the set at some later date. The collector asked me to send photos and measurements in an attempt to find out which chassis should be in the cabinet. I did. A few days later a letter from the Crosley collector brought me up short with researched informations that the Ace 3B had indeed been installed in a portable cabinet but fewer than five hundred had been produced. That tallied; my set was serial 479 V.

I'd need to do a good job of restorations. This is a rare piece. The Crosley Ace 3B portable deserves to be restored and respected for its place in the history of this influential company.

Fortunately the Ace 3B portable was intact, unmodified and only altered by six small holes in the back panel where someone years ago had wired it for off board batteries.

The 3B portable is a real set. I'm proud to own it but looking back to the acquisition of the set, I'm surprised that I even have it. No one seemed to take it very seriously.

**My collector friend is
beginning to speak to me again!**

**ARCA NATIONAL MEET
NORTH LITTLE ROCK, ARKANSAS
JUNE, 1994**

OLD EQUIPMENT CONTEST AWARDS

CLASS I CRYSTAL OR COHERE RECEIVERS 1906-1927

A. Factory Made

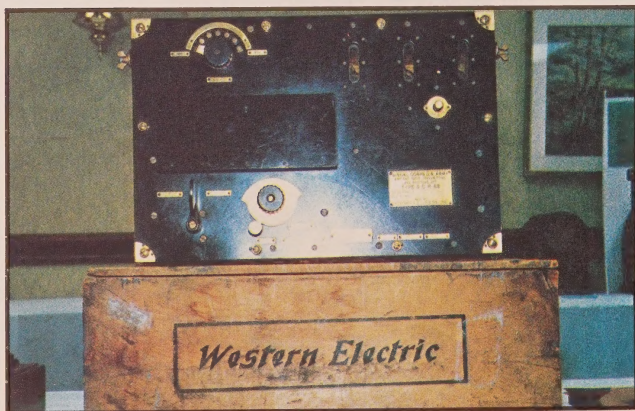
- 1st - Radiophone Super Crystal - John Terry
- 2d - Signal Type R10 - Gary Watkins
- 3rd - Little Gem - Jim Rankin
- Special - Supertone - Dale Jones

B. Homemade or Kit

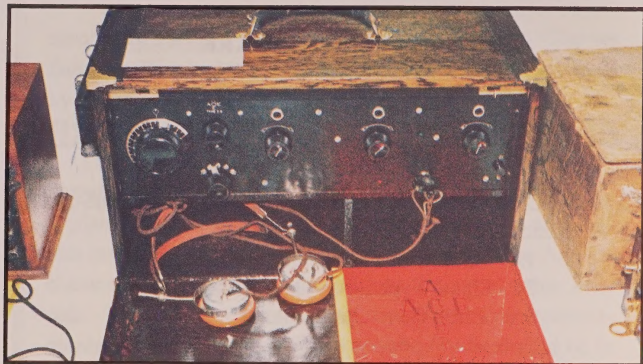
- 1st - Burl Wood Crystal Set

CLASS II REGENERATIVE RECEIVERS

- 1st - Everyhome - Jim Sargent
- 1st - SCR 68 WWI Aircraft Set - Tom Burgess
- 2nd Crosley Ace 3B Portable - Dale Davenport
- 3rd - Tuska 224 - Paul Tucker
- 3rd - De Forest RF5 - Robert Nelson



Class II First



Class II Second

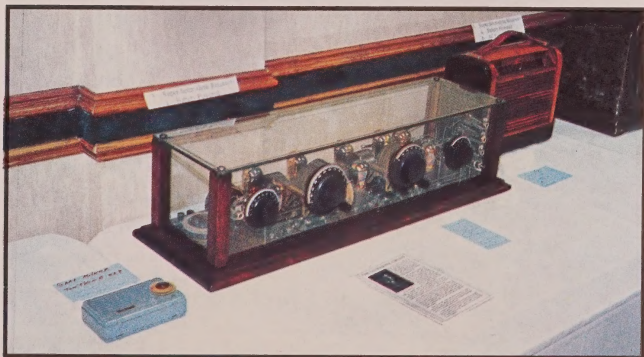
CLASS III SUPERHETERODYNE RECEIVERS

A. Battery Powered

- 1st - Pheonic Ultradyne Glass Set - Craig Ball
- 2nd - Zenith 4-K-435 - Paul Tucker
- 3rd - Tom Thumb 528 - Gary Milner

B. AC Powered

- 1st - Grebe Cathedral 1931 - Kenney Fullerton
- 2nd - Philco 90 - Fred Crews
- 3rd - Unknown Tombstone - Gary Watkins



Class III A. First



Class III A. Second



Peoples Choice Award (TIE) and Class III B. First

CLASS IV RADIO FREQUENCY AMP.

- 1st - David Grimes 4D - Jim Sargent
- 2nd - Kolster 6D - Fred Crews
- 3rd - Kennedy Model 30 - Eloy A. Heras
- 3rd - Standardyne Multivalve - Dale Davenport

CLASS V ART DECO (Metal, Glass, Plastic, Wood, Catalin)

- 1st - Deluxe Chrome Grill - Fred Crews
- 2nd - RCA 66X7 Black Catalin - Robin Stoddard
- 3rd - Bendix MDL 526ML Catalin - Eloy A. Heras



Class IV Second

CLASS VI SPEAKERS

- 1st - Magnavox R2 - Robert Nelson
- 2nd - Workrite Concertone Jr. - Raymond Schrober
- 3rd - Crosley Dynacone (NIB) - Paul Tucker

CLASS VII RADIO ADVERTISING

- 1st - RCA Table Scarf - Sharon Fullerton
- 2nd - Philco Sign 1940 - Pal Tucker
- 3rd - Rand McNally Radio Atlas - Dale Davenport



Peoples Choice Award (TIE) and Class VII First



Class XII First

CLASS VIII

ARKANSAS RADIO MANUFACTURED EQUIPMENT

- 1st - 1924 Model B Superhet - Robin Stoddard
- 2nd - Pioneer 6 - Dale Davenport
- 2nd - Brown Teletone - Paul Tucker
- 3rd - Confidence Test Sets - Tom Burgess

CLASS IX CONSOLES

- 1st - Zenith MDL 775 - Greg Nelson

CLASS X HOME BUILT ANY CIRCUIT

- 1st - 4 Tube Plexiglass Set - Jim Sargent

CLASS XI TELEVISION PRE-1960

- 1st - Sell All Scanning Disk - Tom Burgess

CLASS XII TRANSISTOR RADIO PRE-1960

- 1st - Regency TR-1, XR-2A, TR-8A - Museum of Radio and Technology
- 2nd - Zenith Royal 500 - Paul Tucker
- 3rd - Realton Falcon 6 - Bob Lutz
- 3rd - GE MDL P8501 - Lloyd McIntyre

CLASS XIII NOVELTY TRANSISTOR RADIOS

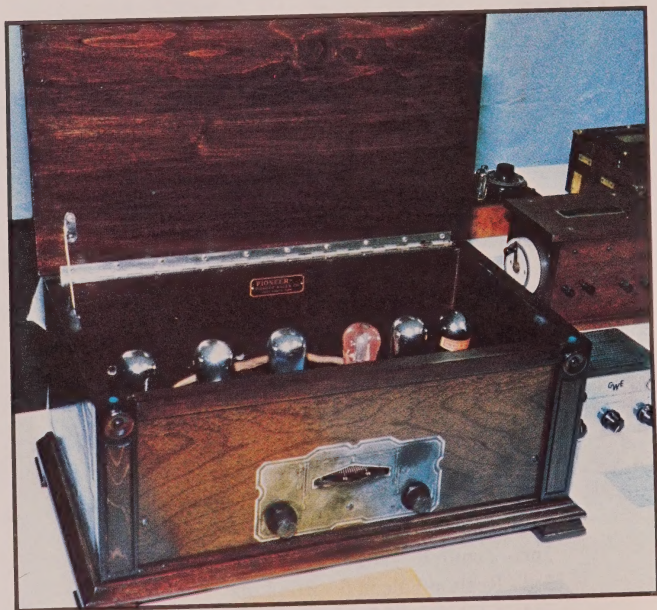
- 1st - Emerson Bar Radio - Raymond Schober
- 2nd - Scale Radio - Paul Tucker
- 3rd - Raid and Pink Panther - Dale Davenport

CLASS XIV NOVELTY TUBE RADIOS

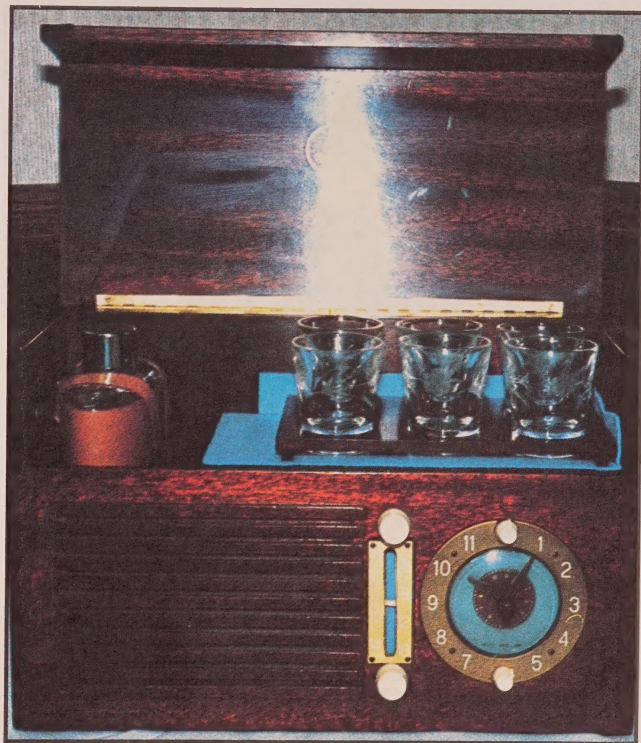
- 1st - Emerson Bar Radio - Raymond Schober
- 2nd - General Tire Radio - Dale Davenport
- 3rd - Coca Cola Cooler - Roland Taylor
- 3rd - Emerson BD197 Mae West - Tom Burgess
- SPECIAL AWARD - Tube Display - Andy Anderson

PEOPLES CHOICE AWARD (TIE)

- Kenney Fullerton - Grebe Cathedral 1931
- Sharon Fullerton - RCA Table Scarf



Class VIII Second



Class XIV First

HOUCK AWARD

Robin Stoddard - Fort Smith Antique Radio Club
 Model B Improved Super - Heterdyne
 Manufactured in Fort Smith, Arkansas
 Designed by J.A. Barry
 1924

CONTEST COORDINATORS

Geoffrey Bourne
 Grace MacMillen



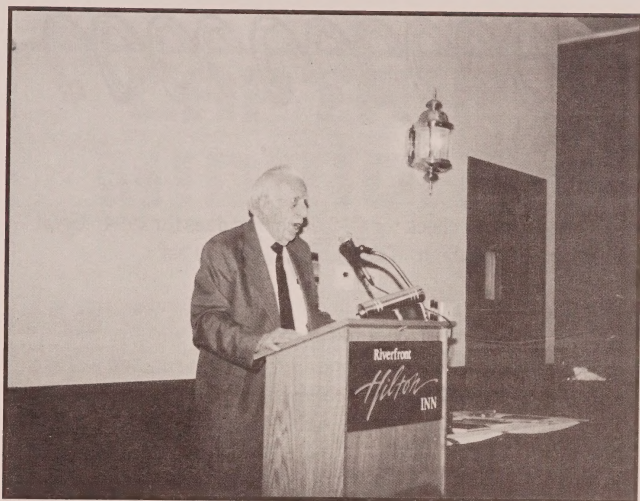
Tom Burgess our host for ARCA '94



**Peoples Choice Award Winners - Kenney & Sharon Fullerton
Presented by Geoff Bourne**



Ladies Collector Corner - Hosted by Barbara Rankin & Grace MacMillen



Orval Smril - 91 years young with more pep than the Energizer Bunny!

Guest Keynote Speaker

Orval Smril

Retired from Southwestern Bell Telephone 31 years ago. First received his ham call at age of 13. 5BN in 1916. Reapplied & received his current call W5BP in later years. This gentle man was born the year that Orville & Wilbur Wright made aviation history, Harley Davidson Motorcycle & Buick were founded. That's almost a century of discovery unequal in the entire history of mankind. Thank you, Orval Smril, for sharing some of your childhood & adult years with us. It's mind boggling to think of all that you have witnessed in your lifetime. We wish you well and many more years of health & happiness.

Dear Ron,

Please find my check for \$ 15.00 for my dues for 1994. Great Gazette, how about "The Ghosts of Radio Past".

Regards,

Lester Rayner

Dear Sirs:

I suppose most people know this but I figured out how to make up my own "B" batteries. I buy the cheaper 9 volt transistor radio batteries at flea markets and etc. Just plug them together for whatever voltage you need. $67.5V = 8$ batteries, $90V = 10$ batteries and so on. Works great and I think these cheapie batteries are better than what you could get back in the 1930s and 1940s. Maybe this will help someone making their portable, portable again.

Yours Truly,

**William G. Mitch
N9JJR
668 W. 725 South
Hebron, IN 46341**

P.S. From Neward Electronics - 67.5 Volt battery \$ 20.80, 90 Volt battery \$ 29.00. my 90 Volt battery for my Hallicrafters AM portable cost \$ 2.50.

CAPTAIN MIDNIGHT

- AGAIN -

I'm sure you all had your favorite radio program before television came along. My all time favorite was Captain Midnight sponsored by chocolate flavored Ovaltine. Ovaltine mixed with milk yields a chocolate flavored milk drink. While Ovaltine endures, sadly Captain Midnight remains only in our memories.

At the end of each daily episode of Captain Midnight a short message would be give in code, with a hint at the next day's happening. Imagine a bomb on board the Captain's plane. If you could decode the message, you might learn that the fuse had burned out!

A Captain Midnight Code-O-Graph, obtained by sending in a dime and an Ovaltine label, would enable you to decipher these messages. Of course, the code changed every few months, necessitating the purchase of first more Ovaltine and next the CODE-O-GRAPH.

The CODE-O-GRAPHS were all different. One was a police whistle with an alpha numeric dial on the side. Another was a badge with a similar dial and a diagonalizing mirror. Those are two that I remember.

I also remember that I greatly disliked Ovaltine (and my Mother knew this). I would have to promise, practically

upon penalty of death, that I would use up the jar. Only then would a new jar arrive. I'd initially make a good show, use a few tablespoons full, and of course, send in the label. Milk was never a problem as my Dad was a milkman. Finishing the Ovaltine was a problem, however, and the rest of the jar would sit there until a new CODE-O-GRAPH was needed. Then it was "grit the teeth and drink time"!

Years later, while working as an announcer for a small local radio station, I invented a program to spruce up my afternoon show called "Captain Blacknight sponsored by chocolate flavored Graveltine". I was quite good at doing all the different voices, the Captain, Chuck, Joyce, and of course, the ever present evil villain!

I soon learned that my number one listener was the Station Manager. He would sequester himself in his office each day between three thirty and four, see no visitors, nor accept any calls until I presented the latest episode of Captain Blacknight.

One day, I deliberately neglected to present the latest episode, going merrily on my way with music and chatter. At about four fifteen, the Manager phoned me at the studio. He was actually in tears!!! "Dick, what happened to Captain Blacknight?" I made some sort of an excuse about replacing paper in the teletype, then brought forth Captain Blacknight. I will always remember that this program had at least one very devoted listener!

Dick Mackiewicz
Coventry, CT



**Collector's Guide
to
Transistor Radios**

by Marty & Sue Bunis

Published 1993

254 pages, paperback, \$15.95

\$ 2.00 postage and handling.

Size 8-1/2" X 5-1/2"

*Order from
Museum of Radio & Technology*

If you were born several years prior to 1954, and remember the beginning years of transistor "pocket radios", you will enjoy perusing this book - Collector's Guide to Transistor Radios. It is a handy guide and reference for the transistor radio collector.

The book consists of 254 pages (glossy finish), over 400 pictures (in color), with 240 company names describing over 2000 models. Model numbers are listed in sequence, with numeric model numbers listed first, followed by any model numbers beginning with letters.

The beginning pages give Acknowledgments, Introduction, Explanation of Pricing Section, and a Basic Transistor Radio Terms and Descriptive Informations section.

The last four pages of the book list 59 Radio Clubs, with addresses, and whom to contact if interested in becoming a member of the radio collecting hobby.

I found the above book to be informative, and a handy reference guide in this new radio collecting hobby.

All Bookstore sales are used to support the Museum of Radio and Technology, Inc.

The Kolster 6D Experience

by Fred Crews

It all started at Springfever '93 when I bought the remains of a Kolster 6D from my friend Ted Babcock. Ted was reluctant to sell the radio to me as he had used the parts of two to get his good set. Ted shared a circuit diagram which helped with the remaining problems. The tubes were gone, the pot-metal dial on the tuning gang was so badly cracked and warped that it was rubbing on both sides, the pot metal framed sensitivity control was hardly recognizable, all the wire wound parasitic grid resistors were open, and I was to find out later that the battery cable was internally open in several different places. One of the two audio transformers was bad, and the other had been changed in bygone years and thus was not original. On the plus side, the interior of the cabinet under the hinged lid was beautiful, the name plate was excellent as was a poster board instruction card for battery hookup and tube placement.

The outside top of the lid was something else- part of the veneer was missing and the remainder was damaged beyond repair. The rest of the outside of the cabinet wasn't too bad except the bottom plate was warped and pulling away from the upper part of the cabinet, and there were other signs of warpage. Still, with all these problems, I thought there might be some fun things to do. I certainly had no vision of making it into a nice set- I just wanted to learn how to do some things that I had read about and to experiment. Since I want all my radios to play, I had some tough problems.

Having scrapped a 32 volt Delco cabinet that was beyond repair, it was possible to remove the top veneer and apply it

to the Kolster. The first step went well, and surprisingly the stain and finish matched the other parts of the cabinet. The rest of the cabinet required minor touch up after attending to the warped bottom.

A junker parts set was acquired from which I got a complete tuning capacitor with dial and dial drive. It had one good audio transformer and the other was repairable. The sensitivity control also had pot metal problems, but was repaired with filled epoxy. Parasitic resistors were rewound, and a portion of the battery cable from the junker was found to be good and was installed.

The Model 6D is a 6 tube TRF with 3 stages of R. F. amplification, a detector, a stage of audio amplification, and finally the audio output amplifier. All tubes except the final audio amplifier are 201A/301A. The final amplifier is a 112A. The 7 battery voltages to operate this radio were supplied from restored early battery eliminators.

At last after about a year the radio worked and surprise, surprise looked like exhibit material. Also, during this year time was spent searching for documentation. Geoff Bourne, our WV ARCA president, turned up a service manual which was perhaps the most significant find. Someone else came up with the original operating instructions supplied with the radio.

Some other relevant history was found. On the staff of The Federal Telegraph Company of California (later to become Federal - Brandes) was an able engineer whose name was Frederick Kolster. This firm is not to be confused with Federal Telephone and Telegraph which was located in Buffalo, NY. Probably to avoid confusion, it was decided to use the brand name of Kolster. First models were 7 and 8 tube and had an alarming 60 per cent return failure rate. An anticipated "more competitive" 6 tube set was introduced for the

1927- 1928 sales year. Included was the model 6D. This did not seem to help sales much- Kolster apparently never had a profitable year. Before they became a manufacturer, Emerson Radio and Phonograph Co. purchased at least 10,000 surplus sets, offering them at ridiculously low prices through retail stores and mail order. Kolster was definitely in trouble when in 1929 it sold over \$3 million worth of radios to unload them, leaving half that amount of radios sitting at the factory.

Bankruptcy proceedings began about this time. Executives of Federal - Brandes, trying to recoup some of their personal losses, pulled some questionable deals for which they were later sued. The Kolster name seems to have disappeared from the radio market by the fall of 1932.

The restored operating radio with its documentation has been entered in two old equipment contests, winning first place in its category at the Southeast AWA Meet in Charlotte, NC and second place in the ARCA National Meet at Little Rock, AR. So ends the Kolster 6D experience; the radio will now rest on the shelf to be occasionally played.



HEADLINE STORY

WASHINGTON RESOLUTION

TO: The Membership

On March 26, 1994, an exploratory meeting was held in Washington, Pennsylvania. The reason for the meeting was to investigate the possibility of a merger of ARCA and AWA.

Over the last few years ARCA has seen its membership remain flat and the interest of its members to serve as its officers diminish. A great deal of this related to the growth of local and regional clubs. AWA membership is stable and seems to maintain a small growth patterns. However, the most pressing issue for ARCA is the erosion of assets to keep our GAZETTE going. We can never seem to reach the break even point.

Many issues were covered at the Washington meeting. Those points included the GAZETTE, current life memberships, ARCA Chapters' special awards, assets of ARCA and AWA, our common goals, and the reasons for establishing one strong national club, as opposed to two. All of these areas were discussed in depth. Financial reports were exchanged, minutes of previous meetings and the inner workings of both clubs were totally exposed. To the best of my knowledge there were no big secrets to be revealed. As a result of AWA's successful annual convention in Rochester, they have the assets that guarantee their future well into the Twenty-first Century.

Many of the reasons for ARCA's formation - some 22 years ago - no longer exist. AWA is considering a change in their magazine and content to additionally reflect the general collector. Their annual convention, as well as their associate sponsored events, already reflect this attitude. Many changes are in order if you, our members, agree to this historical union. The officers, pending approval of AWA directors, have agreed to recognize all of our life memberships and pursue offering life memberships to their members some time in the future. All extended memberships will be honored and, if an ARCA member is already an AWA member, extended membership will be

given beyond current AWA membership. Special awards programs will be carried over. All current ARCA chapters will be recognized, with AWA opening up the possibility of additional chapters. ARCA will provide funds to cover all of these memberships and programs. All assets of ARCA would become the property of AWA. Some Board members would be asked to serve on the AWA Board. In addition, it would be my desire to see AWA maintain the Charter of ARCA to prevent some other club from picking up the name and using it at some future date. Some programs such as the "Old Timer's Equipment Contest" awards program, back issues of the GAZETTE and the considerable value of the Hallicrafters books, could still be administered under the ARCA name. This is only a thought, and I should not bind any suggestions upon the Board or Directors of AWA that might prevent them from acting in the best interests of their organization.

I believe this to be a great opportunity for both clubs, and one whose time has come. Corporations world wide are merging, divesting and becoming leaner. The same economics that applies to them has now come home to apply to ARCA.

I have served for 10 years as vice president and president. The officers and directors have approached the problems that have faced us over the years from many angles within our financial resources. This seems to be our best recourse. The officers and directors present in Washington, Pennsylvania were as follows:

ARCA: Lloyd E. McIntyre II, President
Ronald & Janice Frisbie - Treasurer
William H. Dawson - Secretary
John V. Terrey - Director
Geoffrey Bourne - Director
Lauren Peckham - Director

AWA: Bruce Roloson - President
Dexter Deeley - Treasurer
Joyce Peckham - Secretary
Lauren Peckham - Director

For your convenience we have enclosed a post card. Please vote for or against the proposal, sign and date, and then drop in the mail so we will have the information at Rochester, New York in September.

Your Board of Directors has taken a strong stand for this proposal. Voting 19-1 for the resolution. I commend them in their action to bring America's two great clubs together.

RESOLUTION FOR THE MERGER OF THE AWA AND ARCA

Be it resolved that the Antique Wireless Association Inc. (AWA) hereby agrees to allow the Antique Radio Club of America (ARCA) to merge with it with the following terms and condition:

AWA AGREES TO THE FOLLOWING

- 1 - All current memberships in the "Antique Radio Club of America" (ARCA) will be transferred to AWA with no penalties to the ARCA members. This will apply to Life, two year or any other term.
- 2 - The current balance in the ARCA Treasury account will be used first to offset the long term memberships.
- 3 - The merger between AWA and ARCA will be completed after the dissolution of ARCA as a corporation is completed.
- 4 - Bruce Roloson will set up a committee to review the merging of the OTB and the Gazette. This committee will be made up from members of AWA (Bruce Roloson and new "OTB" editor) and ARCA members (John Terry and Lloyd McIntyre).
- 5 - AWA Board of Directors will consider providing Board Members with the ability to attend board meetings electronically when practical. For those who live a great distance from the board meeting place.
- 6 - AWA agrees that it may appoint some members of ARCA to its Board of Directors.
- 7 - AWA and ARCA will prepare an announcement together that will be sent to both organizations at the same time announcing the union of the two clubs. This is to be done in early May 1994 after the AWA board has approved the merger.
- 8 - AWA will retain the name "ARCA" "Antique Radio Club of America" and add its history to the history of AWA. AWA may also

produce an article in one of its publications describing the formation and union of ARCA and AWA.

9 - AWA will look at expanding its, meeting schedule incorporating perhaps some of the ARCA time frames.

10 - AWA will also provide support for the Museum of Radio and Technology, Inc. of Huntington, WV by means of advertisement in its publications.

11 - AWA will support and expand the current Chapters and establish an "Advisory Committee" made up of Presidents of the chapters.

ARCA AGREES TO THE FOLLOWING

1 - All rights to the name "Antique Radio Club of America" and "ARCA" will be transferred to AWA.

2 - All remaining balance in ARCA Treasury will be transferred to AWA at time of transfer of control before November 1, 1994.

3 - ARCA will turn over to AWA all books, records, banners, or papers used in the operation of the ARCA club at the time of transfer.

4 - ARCA will turn over all rights to the "Antique Radio Gazette" as well as all master paste-ups, back issues, masters of any articles already printed or submitted but not published and any materials used in the production of the ARCA Gazette.

5 - ARCA will turn over to AWA any materials with name ARCA printed on it such as promotional items used for fund raising.

6 - ARCA will convey all rights to the book "The Hallifcrafters Story" by Max de Henseler or any other books that ARCA owns the rights to.

7 - ARCA will transfer all membership records, databases, software or any other materials used in the maintenance of membership records.

8 - ARCA will satisfy any outstanding liabilities before the transition to AWA is made.

I hope to see you in Rochester this fall.

Lloyd E. McIntyre II
President

ARCA Gazette
Charleston, WV

Dick Mackiewicz' piece on electronic capacitors in Spring 1994 issue was interesting, but I disagree with him about filter capacitor size. In a 60HZ full wave power supply using an input capacitor of 4MFd or more raising the input (or output) capacitor value does not significantly raise the supply voltage. I have experimented with this on several radios with power supplies ranging from 250 to 325 Volts and on none of them did an increase of capacitance of up to 50MFd increase the output more than a few tenths of a volt.

A supply design that results in an acceptable hum level originally will not offer significant increase by making it "super quiet".

With an input capacitor of 4MFd or more the input resistance and load resistance of the supply are the largest factors effecting voltage.

I refer you to page 200 Figure 7-5 of the 1955 "Radio Amateur Handbook" or any other text that reflects power supply design of that era.

It would follow that sets of the late twenties might have their voltages increased as above since the input capacitor may be 1 to 2 MFd. But this was before it was possible to get electrolytic capacitors which easily exceeds 8 MFd as opposed to the paper type which were quite large physically per MFd of capacitance.

Half wave supplies as used in AC-DC sets utilize input capacitors at least twice as large to get to the same result because of the lower ripple frequency, 60HZ as opposed to 120HZ. Most began at 20 MFd.

Transistor Topics®

by Ross Smith

Emerson Model 888 Eight Transistor Radios made in the USA

The Emerson 888's have been very popular with the collectors for the past few years and, as a result, prices have gone up on the more desirable units, such as the Transmitter. Under this model number, there are ten different styles of cabinets and five radio chassis numbers, as listed in the following chart. Note that the Vanguard was made with two chassis numbers.

CHASSIS NUMBER YEAR NAME

120374	1958	Vanguard, Pioneer and Satellite
888R	1958	6" x 9" Extension Speaker in Ivory plastic cabinet
120416	1958	Transtimer clock Radio
120472	1959	Transtimer 11
120485	1959	Vanguard, Atlas and Explorer
120655	1962	Galaxy and Titan

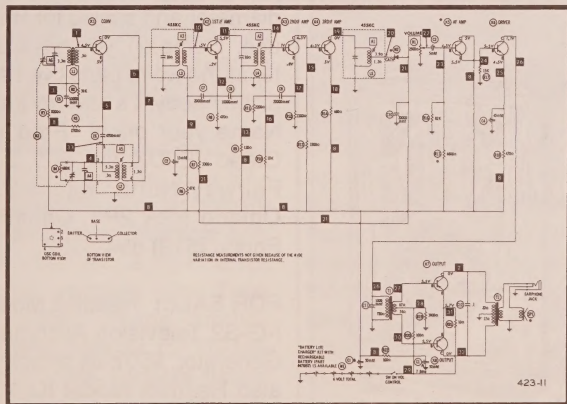
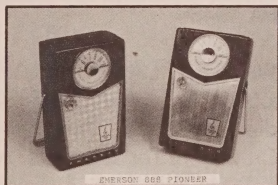
The 888's were made in Jersey City, NJ by Emerson Radio & Phonograph Corporation. They were made in a variety of colors and included a leather case for the Satellite, with tan and black leather cases for the Transtimer's. The original Model 888 was released about one year earlier without a name and became the Pioneer in 1988. The Vanguard and Pioneer will be covered in this issue and the Transtimer will be covered in the next issue.

The eight transistors and one diode are mounted on a printed circuit board with no sockets. Sets are powered by four 1½ volt penlight batteries (AA) connected in series for six volts. Sets are tuned with a two section open plate variable capacitor for the broadcast band only. The speaker is a 3½ inch PM type dynamic. Mercury batteries were recom-

mended for longer life and a charger with carrying bag was available for nickel-cadmium batteries, Emerson part number 471057. Two small holes in the back of the case are used for connecting the battery charger.

The 888's are popular with the collectors because of their good looks, many colors and good performance. Consumer Reports back in 1958 reported good to intermediate performance as far as selectivity, sensitivity and sound output was concerned. One report complained of undesirable background noise. Plastic cases are 4" wide, 6½" high and 2" deep. First models sold for 44 to \$48, depending on the color.

*Sets shown belong to Doug McIntosh and Charles Miller of Elkhart, IN.
Pictures courtesy CTS-Turner Museum, by Joe Carlson.*



Ye Old Swap Shop



FOR SALE: AK Model 36 with tubes and AK Type Y power supply, good condition, \$85; Philco Transitone Model 42-pt91 AM radio (FoS pg. 132), excellent, \$50; GE Model F70 AM short-wave radio, excellent working condition, \$70; Philco Model 40-150 AM short-wave push-button table radio (on back it says "Built to Receive Television sound"; FoS pg. 127), good condition, \$60. Bill Hurni, 329 Evergreen Dr., North Wales PA 19454

WANTED: LAST CALL: Still looking for an Aeroplane-style dial and bezel similar to a Crowe #123 or substitute. Approximately 3-1/2 inches in diameter and scaled for Ham use. Come on, you guys, after all the weird parts I've sent to the needy, it's now my turn! Name your price! Fred W. Creed VE3DZ, Apt. 503, 283 Fairway North, Kitchener, Ontario N2A 2P1, Canada. Phone (519) 894-5582

FOR SALE: Heathkit Model I-G-S2 Television Alignment Generator, \$50 plus shipping; also Heathkit Model IO-101 Vectorscope, \$50 plus ship-

ping. Both units like new. Also CRT's for oscilloscopes: Two (2) No. 5UP1; One (1) No. 59-4. \$5.00 each plus shipping. Walt Dallas, 7428 Centenary Drive, Dallas TX 75225-4515. Phone (214) 363-1983

FOR SALE: (1) Homemade crystal sets and parts. Galena crystals \$1.00 each, or Super Galenas at \$2.00 each. (2) Philmore "little Wonder" galena crystal set. This is a REPRO set built on a genuine Philmore plastic (pink) base. \$20 postpaid, including a super galena crystal. (3) Matched pair of two-inch-square illuminated power supply meters, 5-10-15-20 Vdc or Adc, specify. Leonard W. Gardner W2QBC, 458 Two Mile Creek Road, Tonawanda NY 14150. Phone (716) 873-0447

WANTED: Tapped switch as used on AK Model 20 & 21 - need two (2); Tungar bulb for Westinghouse storage battery charger, 2 or 6 amp; Hytron vacuum tube Type HY114B; Three similar Bakelite sockets for UV199 tubes; One variable tuning capacitor for Freshman Mas-

terpiece receiver. Tad Drogoski N3JZQ, 507 Coal Valley Road, Jefferson Boro PA 15025-3703. Phone: (412) 466-5950

WANTED: Repairable Arvin radios, Model 444 (red), Models 402, 422, and 20 (any color). Cabinets for Farnsworth Model AT-12 or AT-15. Loose Coupler coils and crystal sets (prefer factory-made), but will consider others; also any miscellaneous crystal detector units. James A. Di Ruzza, 2607 Old Troy Pike, Dayton OH 45404. Phone (513) 233-5004

ATTENTION: A reprint of MESCO Catalog No. 12, March 13, 1921, is being considered. This catalog is from the Manhattan Electrical Supply Co., with the title "Manual of Wireless Telegraphy and Catalog of Radio Telegraph Apparatus." This catalog contains over 200 pages plus an index; 150 of these pages feature line drawings of electrical parts available at that time. It will be reprinted if enough interest is shown. Please direct correspondence to James A. Di Ruzza, 2607

Old Troy Pike, Dayton OH 45404. Phone (513) 233-5004

FOR SALE: New and old crystal detectors, new cotton-covered loop antenna wire, experimenter and restoration supplies, test equipment, and much more. Send long SASE for flyer. B&K 700 tube tester, appears new: Original manual, supplements, scale overlays, even original advertising brochure. \$125 plus shipping.

WANTED: Old head-phones, buy one pair or a hundred! Also want head-phone plugs, parts, and paper. Will pay your price! Dick Mackiewicz, 1549 N. River Rd., Coventry CT 06238. Phone (203) 742-8552

ATTENTION: Antique phonograph repairs, parts, springs, needles via UPS. Free catalog. Dealers wanted! Rod Lauman, Victrola Repair Service, 19 Cliff Street #2, St. Johnsbury VT 05819. Toll free: 1-800-239-4188, evenings.

RADIO HISTORY FOR SALE: Don't miss LEE DeFOREST explaining his AUDION in illuminating technical detail. He describes its development from 1903 to its 1920 applications. This 40-page 1920 Franklin Institute publication is available for \$15 ppd. It's a rarely-seen key piece of radio history! Gil Arroyo, 2766 SW 167th Street, Seattle WA 98166.

FOR SALE: A-C Dayton Co. Type XL-5 Polydyne AM broadcast receiver, Serial No. 1928, manufactured in 1925 by the A-C Electrical Co. of Dayton, Ohio. All tubes and internal components in excellent condition; slight damage to wooden case. Physical size is approximately 8" x 8" x 24" long. This radio needs a good home and loving restoration; asking price is \$300, but all offers will be considered. Photo available on request. If you're interested in this unique radio, contact Kevin Bosh, 3021 SW 27th Ave., Apt #1, Miami FL 33133. Phone (305) 444-7142 Home, (305) 529-9964 Work.

FOR SALE: Large list of

books: Early radio, electronics, TV. Send large SASE. Ron McClellan, 201 W. Boot Road, West Chester PA 19380.

FOR SALE: VOLUME CONTROLS. Do you need a volume control with switch for your AC/DC radio? Send SASE for brochure. James Fred, R1, Box 41, Cutler IN 46920

WANTED: Chassis for a Radiola Super-Heterodyne or will consider selling cabinet. Also need cabinets for Radiola Regenoflex and the following chassis: AK 228; General Motors 250; Crosley 125, 1137; Majestic 363; Westinghouse WR-14; Philco 37-89. Brian Kurrle, 208 Crafton Road, Bel Air MD 21014. Phone (410) 838-6534

WANTED: Schematic for Zenith Super Seven; also anyone able to fabricate a set of pulleys for this set. Bill Noro, 126 Evaline Street, Pittsburgh PA 15235. Phone: (412) 371-2988

WANTED: Transistor radio literature. Original service

manuals, magazine ads, promo flyers, operating manuals, catalogs, technical spec sheets, or any printed material pertaining to transistors. Will buy, or have same to trade. Please write with haves and wants. Robert Ross, Box 1003, Str. B, London, Ontario N6A 5K1, Canada

WANTED: Dept. of Commerce Callbook "Commercial and Government Radio Stations of the U.S." for 1922, 1923, 1926, and 1929. R. Arrowsmith W4JNN, PO Box 166, Annandale VA 22003. Phone: Call collect (703) 560-7161

WANTED: Cancelled stock and bond certificates from pre-World War II radio and television companies.

FOR SALE: Dumont Model RA-346, white-framed versions, in both the clock and non-clock models, in excellent cosmetic and working condition (all original): \$275. Gerald Schneider, 3101 Blueford Road, Kensington MD 20895-2726. Phone: (301) 929-8593

FOR SALE: Longines Symphonette Model LCR-220 flip-numeral AM-FM clock radio, pedestal style, circa 1974. Good condition with original instructions. \$10.00 postpaid. Ken Greenberg, 4858 Lee, Skokie IL 60077. Phone (708) 679-8641

WANTED: Martian "Beauty" one-tube receiver; Clapp-Eastham "Baby Emerson"; Industrial Radio Service "Baby Ultra 400" as seen on p121 of Vintage Radio; will pay appropriately. Also need RCA AG-1380 collapsible loop antenna for my Radiola VI; RCA Faradon UC-1820 variable tuning capacitor. Stephen C. Brown, 3808 Champaign St., Charlotte NC 28210. Phone (704) 847-1301

WANTED: HELP! I am offering \$40 to buy your Stancor PC-8410 transformer, new in box. Carl Creque, #91 Escudero Street, Culebra Island PR 00775-0203.

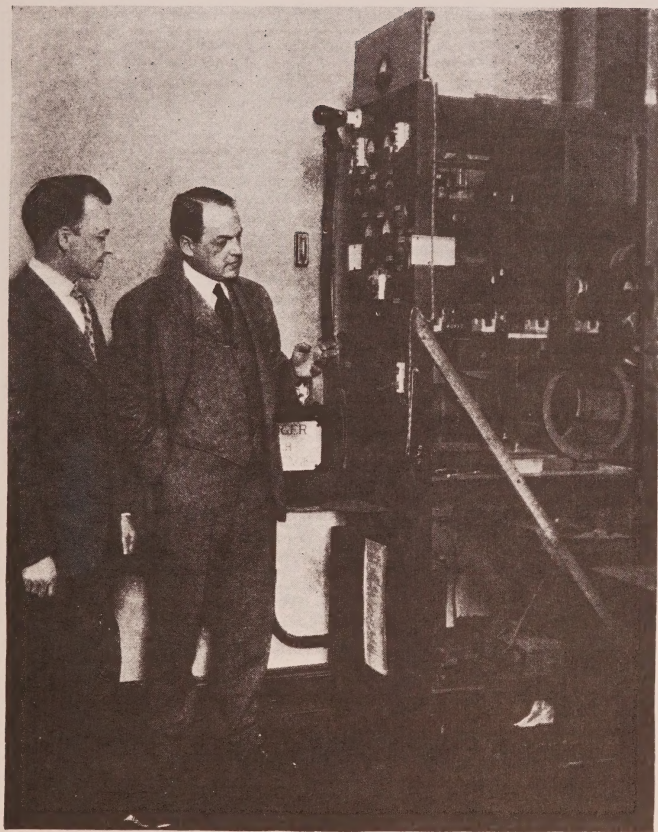
WANTED: Any paper, originals or copies, on the Lettine

Radio Transmitter, Model 240. I will gladly repay you for your costs and efforts. Robert Stapleford, 1800 SW Randolph Ave., Topeka KS 66604. Phone (913) 234-4628

FOR SALE: RCA 9X571 cabinet and knobs.

WANTED: (1) Zenith chassis 6A02 for model 6S527 table model, complete, less tubes and restorable; (2) Philco 90 cathedral parts for chassis using one 47 output: Speaker with good wiring and with good unbroken plug; original line cord plug; two original globe-type 27 tube shields; and two original filters that fit in the right rear corner of this particular 90 chassis. Ed Martin, 485 Benwood Hill Road, Benwood WV 26031





Underwood and Underwood

The Watchdog of the Ether

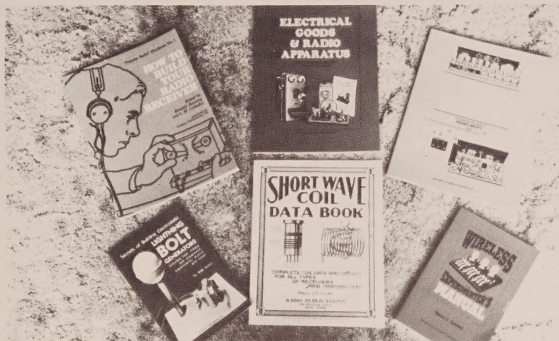
The instrument shown above is probably the most accurately tuned radio transmitter in the world. It is known as station WWV, and it is operated by the United States Bureau of Standards for the purpose of giving the broadcasters of the land an accurate check on the frequencies at which they broadcast. Once a month WWV goes on the air with a "program" of standard frequency broadcasts. At each broadcast eight standard frequencies are transmitted, consisting of an announcement of the frequency followed by a series of long dashes of the correct frequency. Broadcasters and experimenters not on the exact wavelength of the transmission may obtain their calibration by means of harmonics. Station WWV is under the watchful care of Dr. J. H. Dellinger, who is shown here (left) explaining its operation to Radio Commissioner Orestes H. Caldwell.

COLLECTOR BOOKS

Collector's Guide to Antique Radios by Marty & Sue Bunis, 5,000 models, 400 color pictures 2nd Ed.....	\$16.95
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These books are wonderful reference material that will show you how to build those great old radios.



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ARRL - 75 Years of Amateur Radio, Hardback.....	\$20.00
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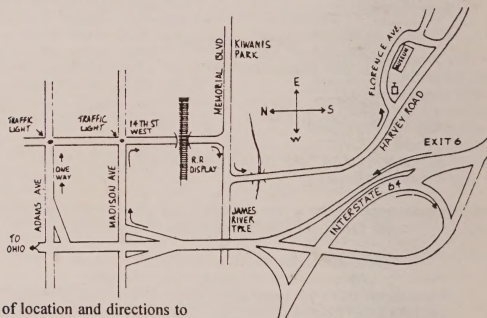
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